Team 5
Section 101
11/08/19

Project Milestone 4 - Updates to features, Architectural Design, Front End Design, Web Services Design, Database/Back End Design

Features of Shelf Life:

- **Create account**
  - Creating individual menu items and ingredients per dish
  - Specify price of each menu item
  - Create username and password

- **Manager/employee login**
  - User Name
  - Password

- **Order form-Modified**
  - Used to re-order ingredients
  - Shows a predicted amount of each ingredient to order
  - User can order the predicted amount or a different amount
  - When submitted the inventory and profit is updated.
    - **We are getting rid of the feature that shows a predicted value of how much ingredient the restaurant should order**

- **Inventory-Modified**
  - Each menu item will have a specific amount of each individual ingredient.
  - When a menu item is ordered, the ingredients will be subtracted from the inventory.
  - When an order form is submitted, the inventory is updated
  - We will display how much of each individual ingredient is left, along with the percentage.
  - When an item runs low(below 30%), an alert is sent to dashboard advising the manager to re-order. The system will recommend how much of the ingredient should be re-ordered based on past usage.
    - **Each ingredient will have its unit (what it is measured in) displayed as well**

- **Sales- Modified**
  - The sales function keeps track of profit/costs for the restaurant. For each dish ordered, the price of the dish is added to the restaurant's profit.
  - Under the sales tab there will be an option to display past sales. The user can view sales from the past day, week, month or year.
    - **We are getting rid of the option to track to amount of money spent on each individual ingredient**

- **Dashboard**
  - Acts as the home page
  - Displays low inventory warnings if any exist. Also shows a brief summary of the sales for the current day
- **Analysis-Deleting this function**
  - This would focus on a comparison of specific dishes
  - Would display a graph of a chosen dishes sales of selected amount of time
    - Month, quarter or year
  - Would show which dishes get ordered more in certain seasons/months
  - Would allow managers to see what ingredients they should stock up on for an upcoming month/season

- **Taking an Order- Modified**
  - This function is where the server enters a customers order
  - The user clicks on a button with the dishes name to send an order
  - This function sends the information of the dish, cost, ingredients, date and time to other functions
    - **When a button is pressed to send an order, a pop up appears allowing the employee to add extra ingredients, or leave out ingredients for the dish. This is calculated in the inventory.**

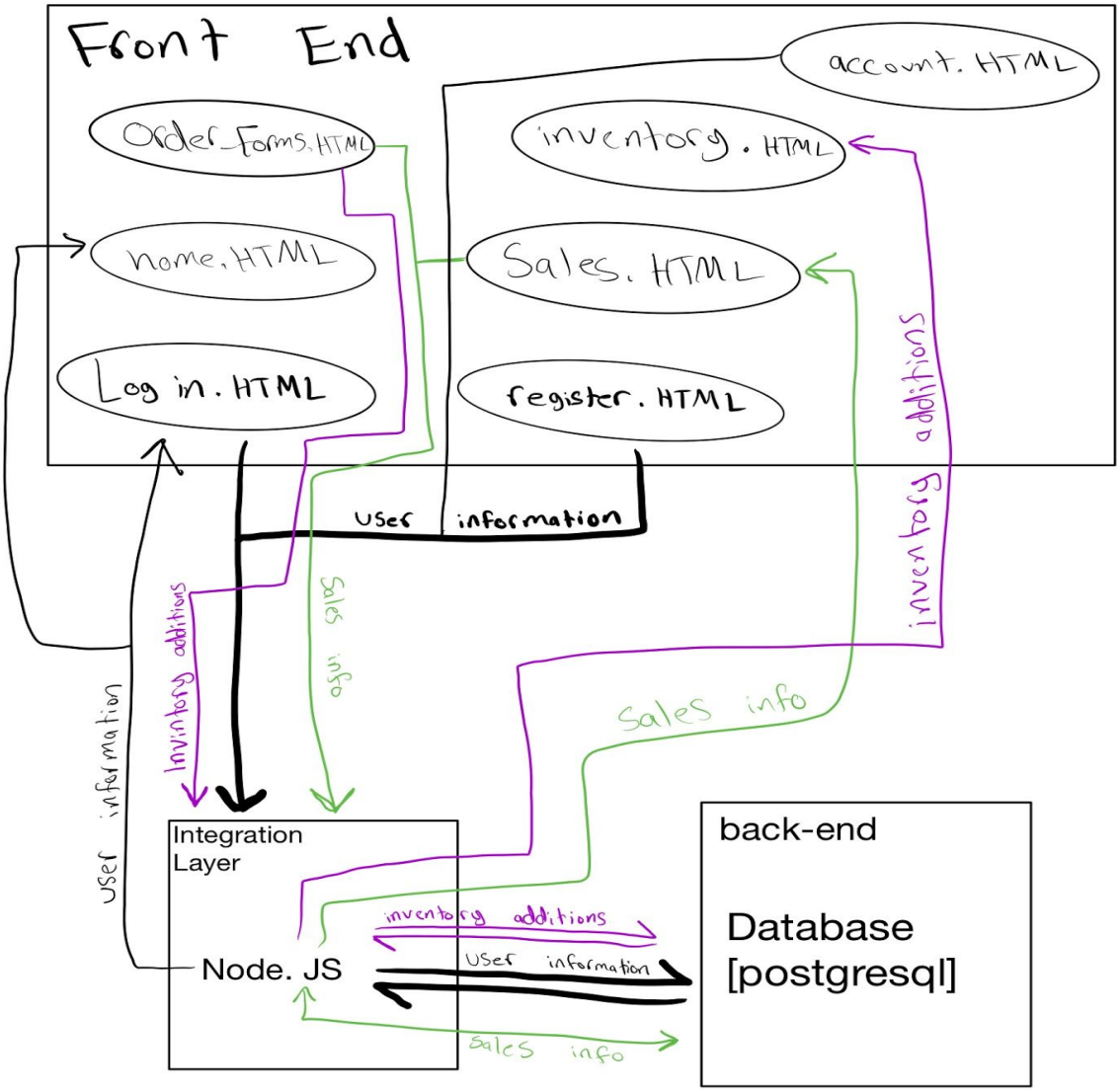
Feature changes:

Because we lost a group mate, we had to simplify our project a little bit. We want to make sure we have the basics of our software working before we implement other cool features. Consequently, we are getting rid of the analysis function, and the feature to track and compare money spent on individual food items. We are also getting rid of the feature in the order form tab that shows a predicted value of how much ingredient to re order. If we have time, this is the feature we'd like to add back in. These features are not vital to our software's application. They are just cool things to have. The rest of our features are staying the same as we move forward.

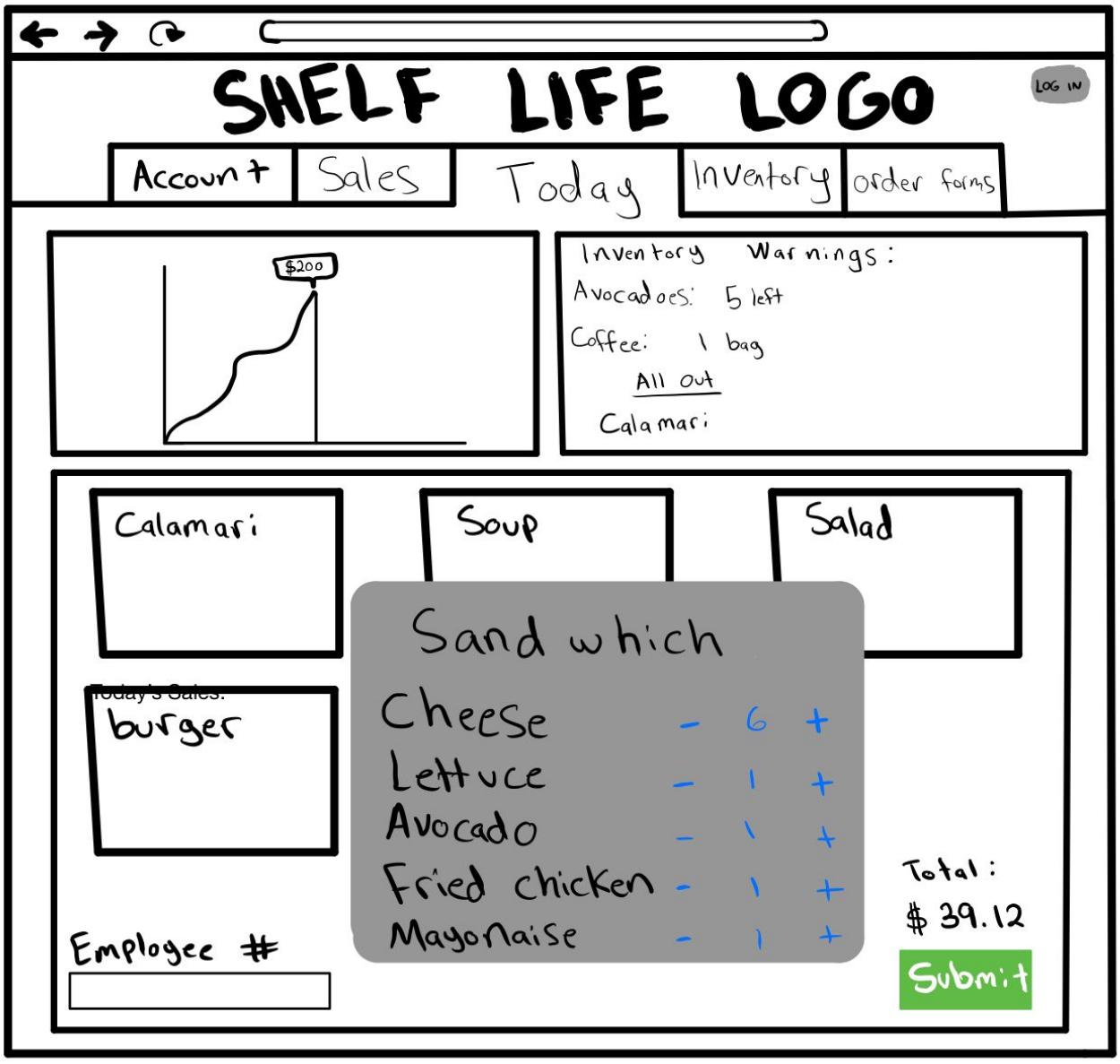
Priority Order of Features:

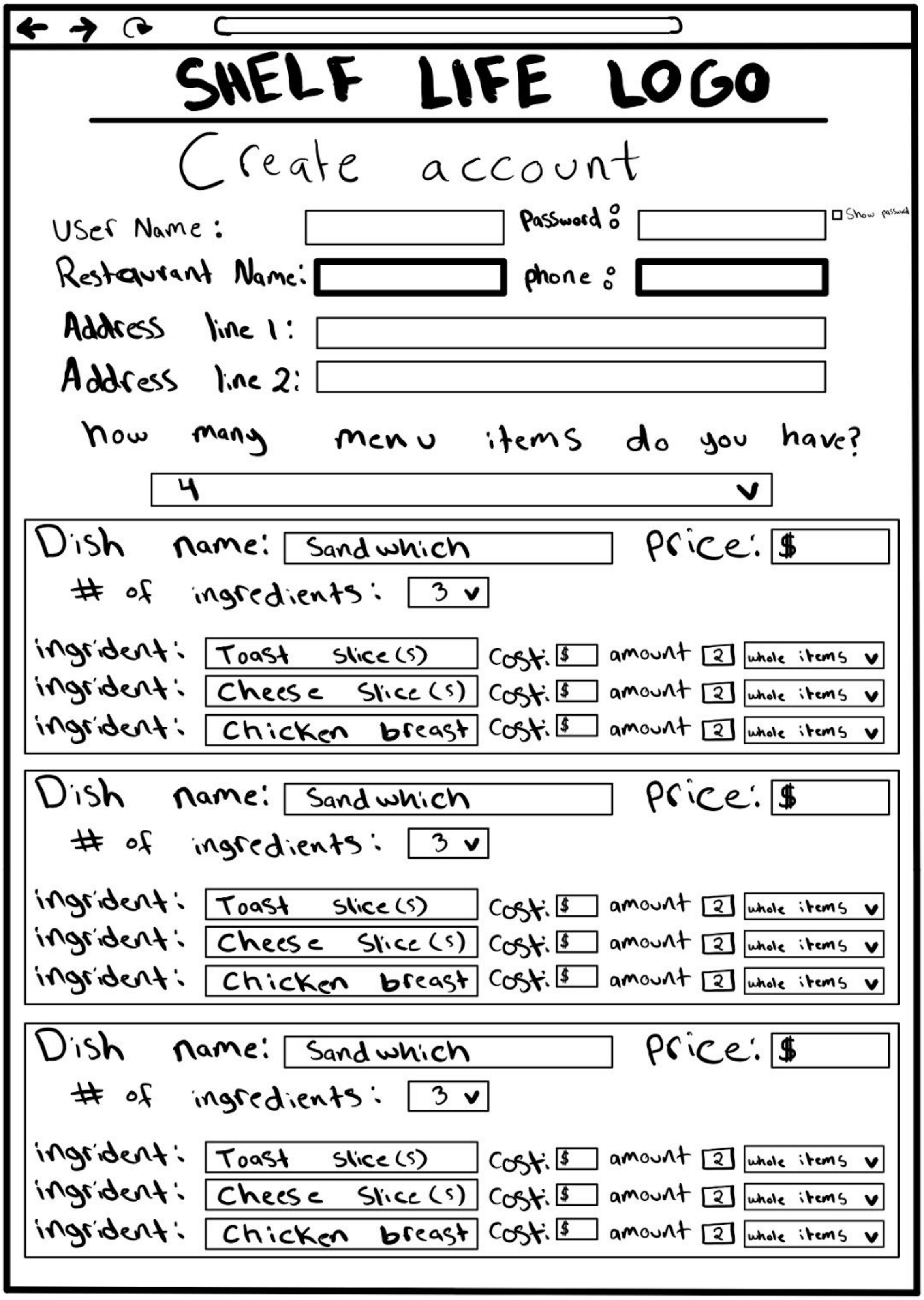
1. Create account
2. Login
3. Dashboard/home page
4. Order Form
5. Inventory
6. Sales
7. Taking an Order

Architecture Diagram:

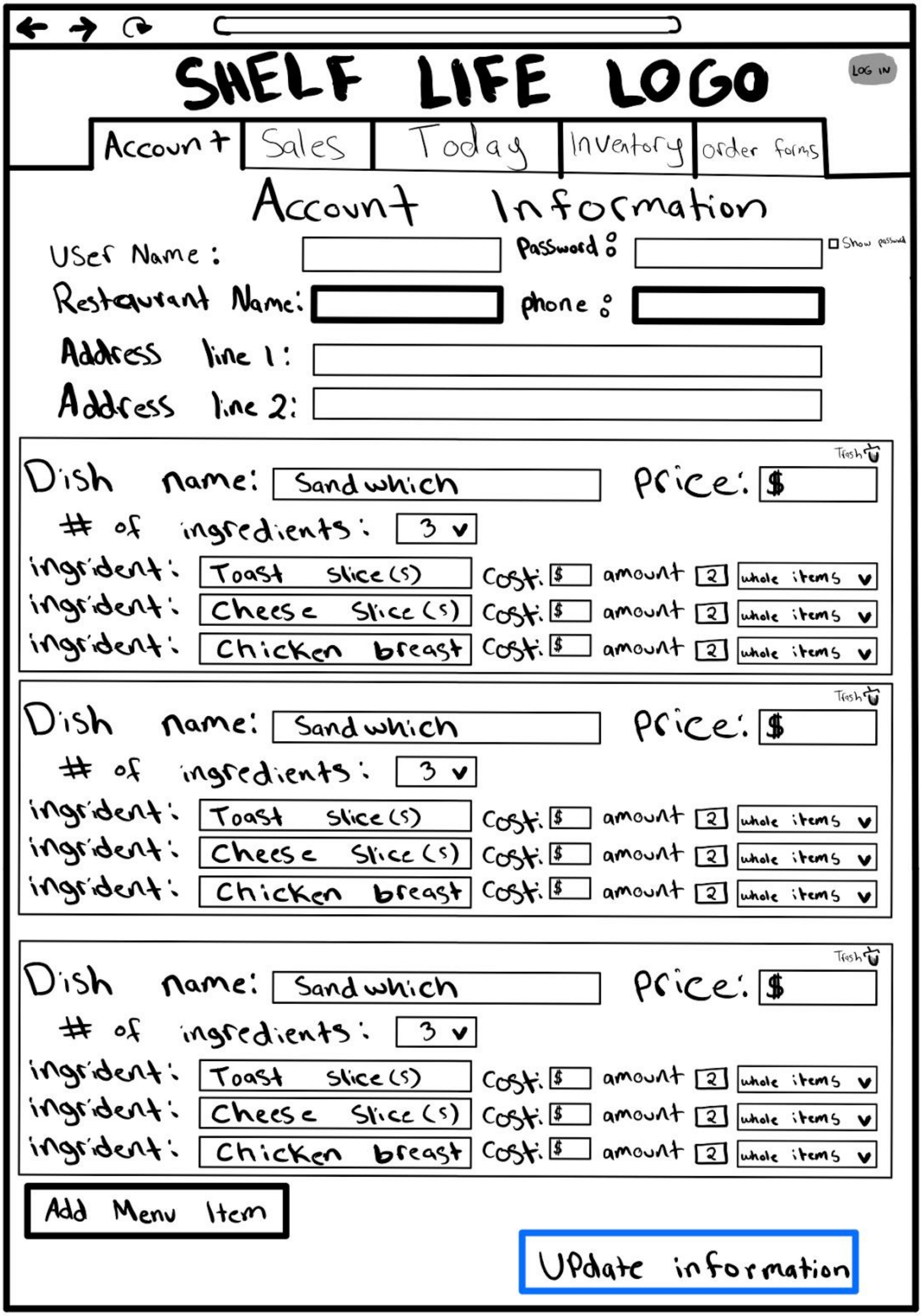


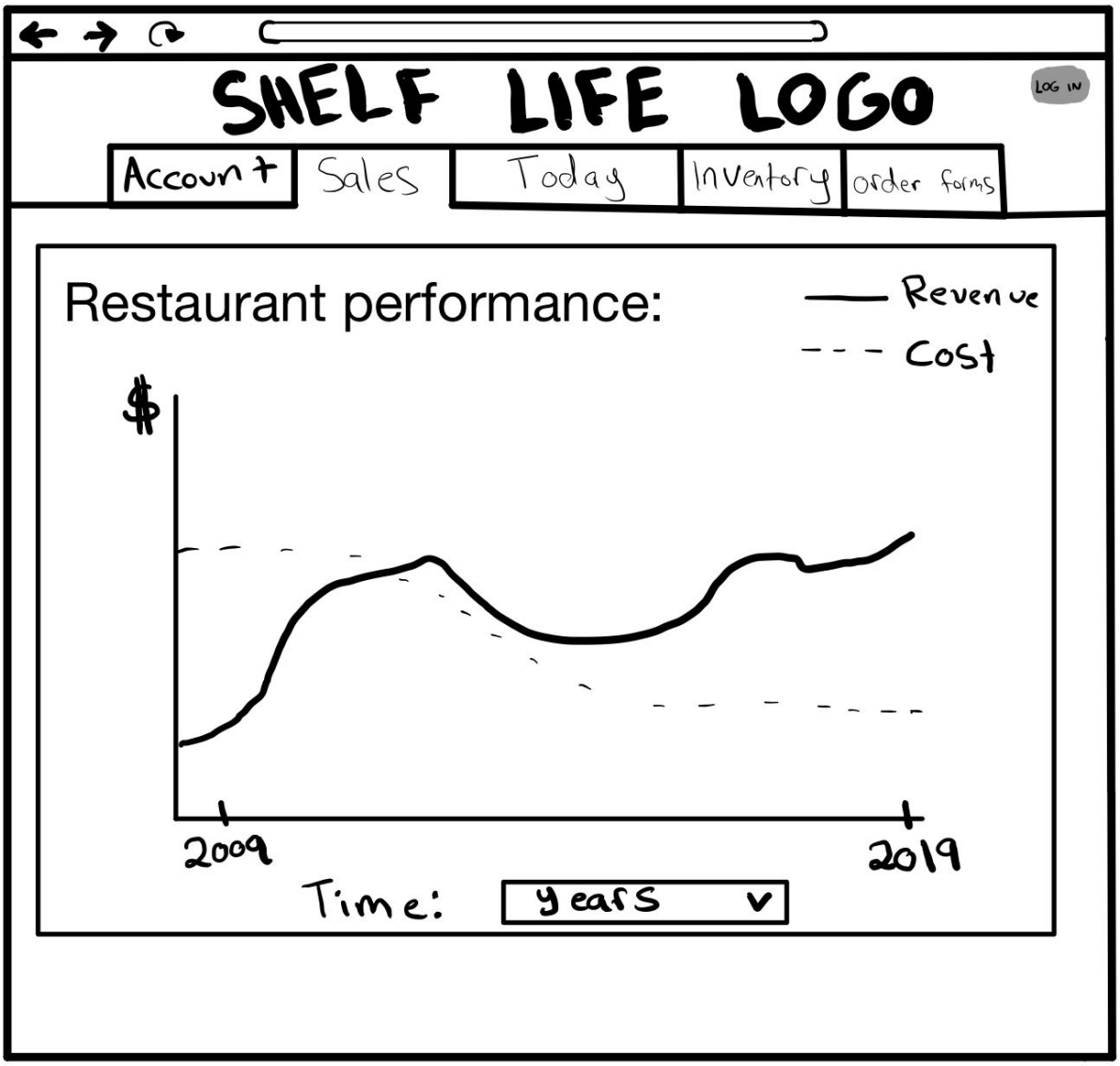
Front End Design:

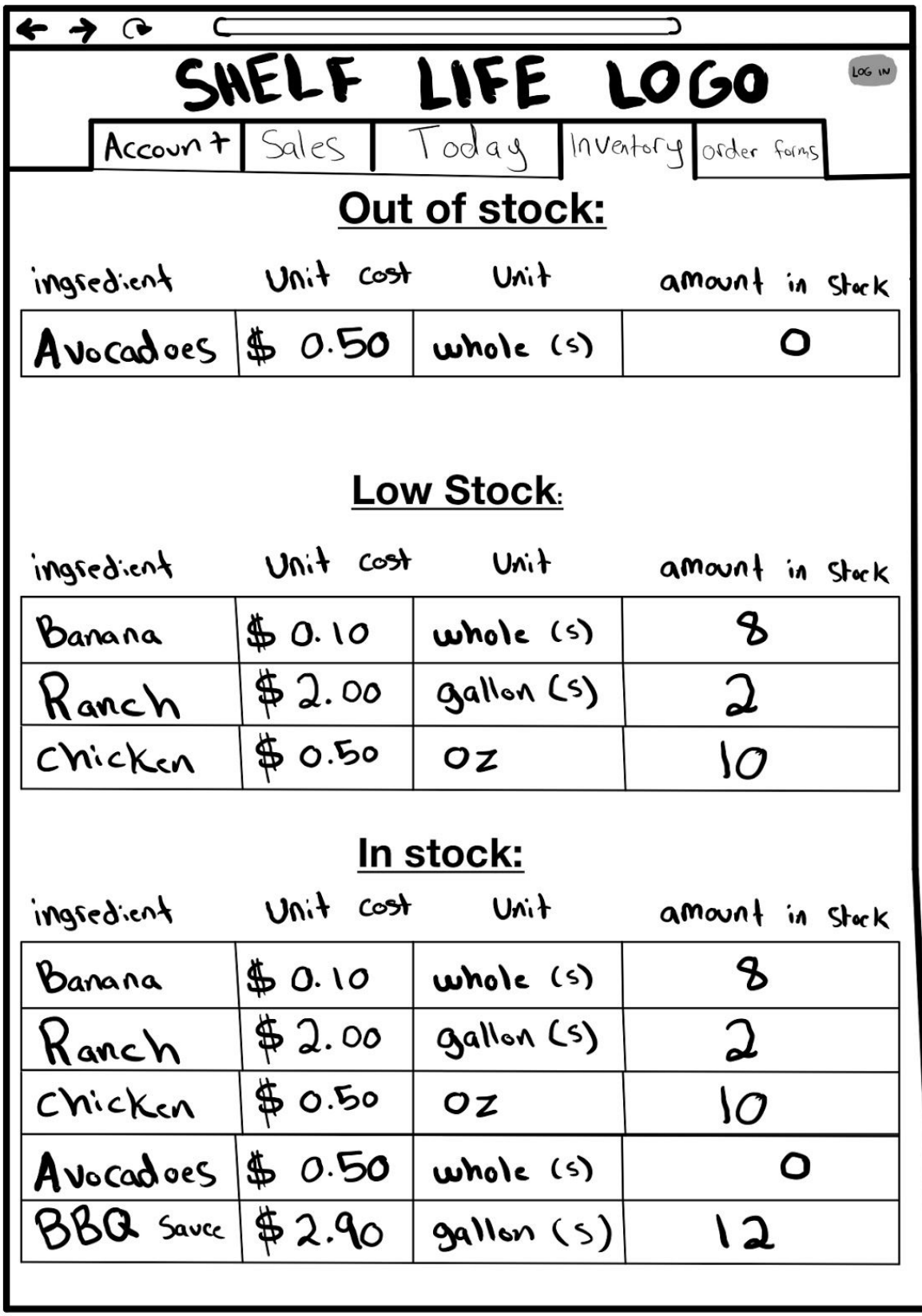


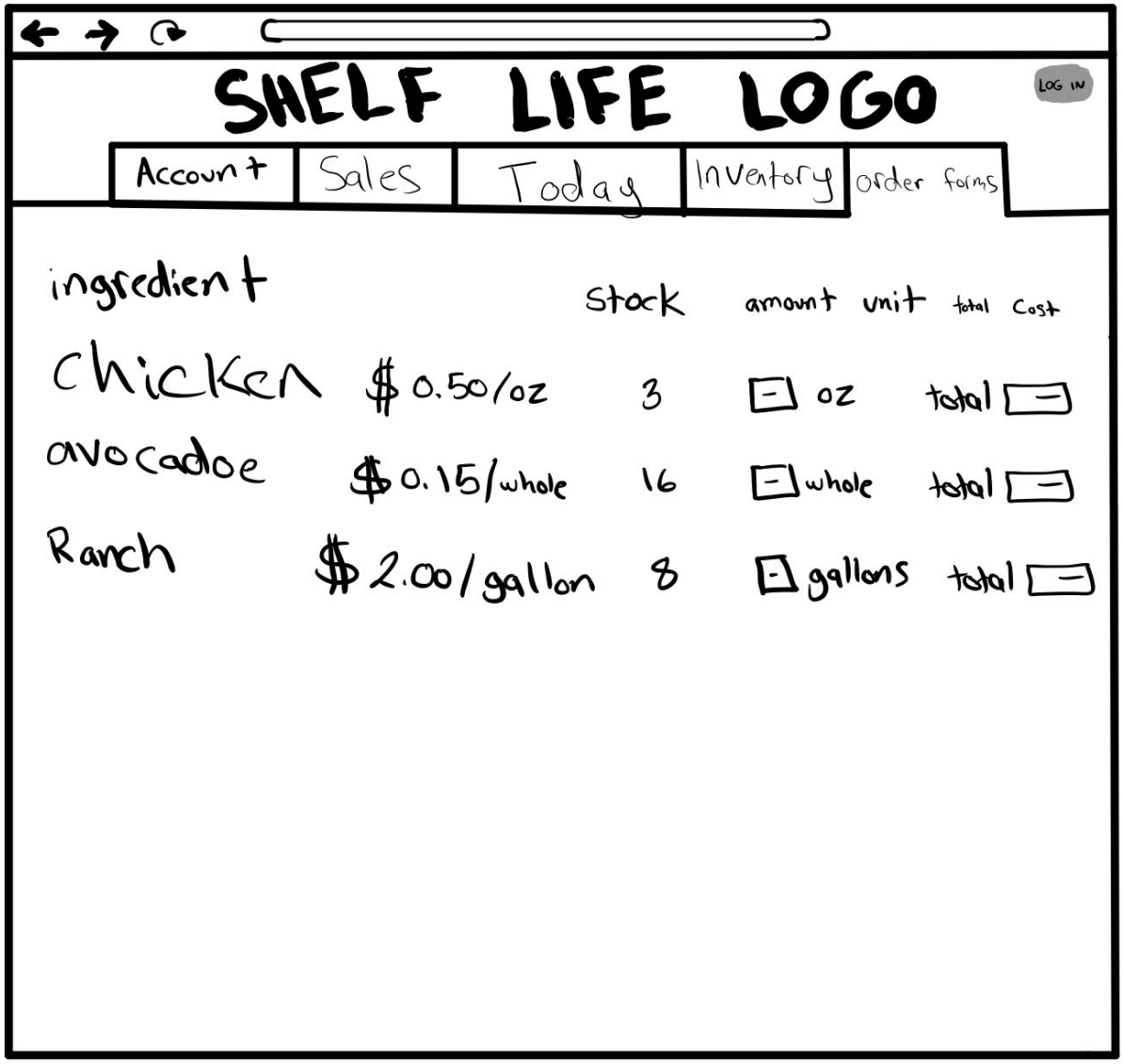

SHELF LIFE LOGO
Create account
User Name:
Password:
Show password
Restaurant Name:
phone:
Address line 1:
Address line 2:
how many menu items do you have?
4
Dish name: Sandwhich
Price: $
# of ingredients: 3
ingrident: Toast slice(s) cost: $ amount 2 whole items
ingrident: Cheese slice(s) cost: $ amount 2 whole items
ingrident: Chicken breast cost: $ amount 2 whole items
Dish name: Sandwhich
Price: $
# of ingredients: 3
ingrident: Toast slice(s) cost: $ amount 2 whole items
ingrident: Cheese slice(s) cost: $ amount 2 whole items
ingrident: Chicken breast cost: $ amount 2 whole items
Dish name: Sandwhich
Price: $
# of ingredients: 3
ingrident: Toast slice(s) cost: $ amount 2 whole items
ingrident: Cheese slice(s) cost: $ amount 2 whole items
ingrident: Chicken breast cost: $ amount 2 whole items


SHELF LIFE LOGO
Login
Username:
password:


SHELF LIFE LOGO
LOG IN
Account
Sales
Today
Inventory
order forms
Account Information
User Name:
Password:
Show password
Restaurant Name:
phone:
Address line 1:
Address line 2:
Trash
Dish name: Sandwhich
Price: $
# of ingredients: 3
ingrident: Toast slice(s) cost: $ amount 2 whole items
ingrident: Cheese slice(s) cost: $ amount 2 whole items
ingrident: Chicken breast cost: $ amount 2 whole items
Trash
Dish name: Sandwhich
Price: $
# of ingredients: 3
ingrident: Toast slice(s) cost: $ amount 2 whole items
ingrident: Cheese slice(s) cost: $ amount 2 whole items
ingrident: Chicken breast cost: $ amount 2 whole items
Trash
Dish name: Sandwhich
Price: $
# of ingredients: 3
ingrident: Toast slice(s) cost: $ amount 2 whole items
ingrident: Cheese slice(s) cost: $ amount 2 whole items
ingrident: Chicken breast cost: $ amount 2 whole items
Add Menu Item
Update information


SHELF LIFE LOGO
LOG IN
Account
Sales
Today
Inventory
order forms
Restaurant performance:
Revenue
Cost
$
2009
2019
Time:
years


SHELF LIFE LOGO
LOG IN
Account
Sales
Today
Inventory
order forms
Out of stock:
ingredient
Unit cost
Unit
amount in Stock
Avocadoes
$ 0.50
whole (s)
0
Low Stock:
ingredient
Unit cost
Unit
amount in Stock
Banana
$ 0.10
whole (s)
8
Ranch
$ 2.00
gallon (s)
2
Chicken
$ 0.50
oz
10
In stock:
ingredient
Unit cost
Unit
amount in Stock
Banana
$ 0.10
whole (s)
8
Ranch
$ 2.00
gallon (s)
2
Chicken
$ 0.50
oz
10
Avocadoes
$ 0.50
whole (s)
0
BBQ Sauce
$ 2.90
gallon (s)
12



- This is our basic wireframe of what the front end would look like. Everything will be implemented using HTML, CSS, and Bootstrap
- Our main tabs are going to be the main dashboard, inventory, order forms, sales, and Account.
    - The main dashboard will feature:
        - A basic graph of today's sales
        - A warning if any ingredients are running low
        - A place to submit a customers order

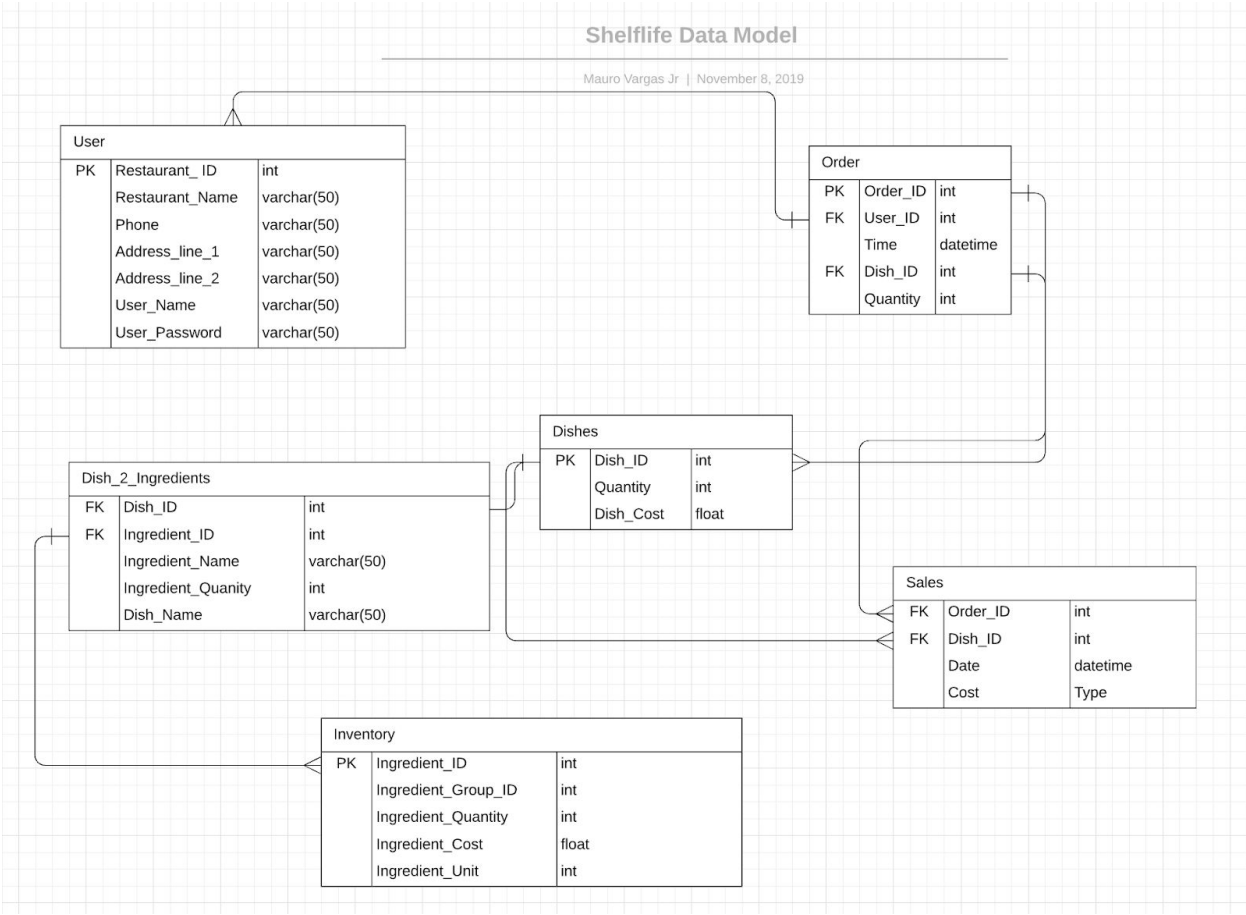
                - Boxes listing out menu items. When a box is clicked the dish is ordered
                - Displays order summary
                - A submit button to send the order
    - The inventory tab will feature:
        - A table of ingredients that are out of stock
        - A table of ingredients that are in low stock
        - A table of ingredients that are in stock
        - Each table will display ingredients, current stock, percentage left, units
    - The order forms tab will feature:
        - A table of all ingredients, current stock, amount to re order, units, price per unit, and re-order cost for that ingredient
        - The bottom will display total reorder cost
    - The sales tab will feature:
        - A chart that will have a dropdown menu that gives the user an option of timeframe
            - This chart will then show sales over the chosen timeframe
            - The timeframes would be past day, week, month, year, and all time
    - Account(restaurant) tab will feature:
        - Display the restaurants information (phone number, username, address etc.)
        - Allow the user to change their account information
        - Display menu items
        - Allow user to add or delete menu items

Web Service Design:

- We aren't using any API's for our software. Our program doesn't have any features that would need to use an API.

Database design:

- Technology to store application data: PostgresSQL.
- Summary design:
    - User table will hold user information of the user and the restaurant menus when an account is created.
    - Order table will receive the User_ID from the front end. The user will enter the Dish_ID and the amount of the Dishes ordered. A SQL script in Restaurant.js will calculate the amount of ingredients that need to be subtracted from the Ingredient Table. The Ingredient Table will hold the specific ingredients that go into each dish. Restaurant.js will also run another script that will calculate the sales of the order.
- Design of application of database, schema and data entity types :



- Files for back end:
    - Restaurant.js
    - Dish_2_IngredientsFile.csv
    - Dish_InventoryFile.csv
    - InventoryFile.csv